

Amendments to the Claims

This listing of the claims will replace all prior versions, and listings, of the claims in the application.

Listing of the Claims:

Claim 1 (cancelled)
Claim 2 (cancelled)
Claim 3 (cancelled)
Claim 4 (cancelled)
Claim 5 (cancelled)
Claim 6 (cancelled)
Claim 7 (cancelled)
Claim 8 (cancelled)
Claim 9 (cancelled)
Claim 10 (cancelled)
Claim 11 (cancelled)
Claim 12 (cancelled)
Claim 13 (cancelled)
Claim 14 (cancelled)
Claim 15 (cancelled)
Claim 16 (cancelled)
Claim 17 (cancelled)
Claim 18 (cancelled)
Claim 19 (cancelled)
Claim 20 (cancelled)
Claim 21 (cancelled)
Claim 22 (cancelled)
Claim 23 (cancelled)
Claim 24 (cancelled)
Claim 25 (cancelled)
Claim 26 (cancelled)

Claim 27 (cancelled)
Claim 28 (cancelled)
Claim 29 (cancelled)
Claim 30 (cancelled)
Claim 31 (cancelled)
Claim 32 (cancelled)
Claim 33 (cancelled)
Claim 34 (cancelled)
Claim 35 (cancelled)
Claim 36 (cancelled)
Claim 37 (cancelled)
Claim 38 (cancelled)
Claim 39 (cancelled)
Claim 40 (cancelled)

Claim 41 (currently amended) A method of increasing erucic acid C₂₂- or greater fatty acid proportion in a plant-derived seed oil comprising introducing into a plant a heterologous nucleic acid encoding a fatty acid elongase operably linked with a promoter capable of increasing expression of said fatty acid elongase, wherein said fatty acid elongase comprises the amino acid sequence set forth in SEQ ID NO: 24, cultivating a the plant as defined in claim 36, and then extracting the plant-derived seed oil therefrom, the oil having increased erucic acid C₂₂- or greater fatty acid proportion when compared to a control plant lacking the heterologous nucleic acid molecule.

Claim 42 (cancelled)

Claim 43 (currently amended) The method according to claim 41 42, wherein the plant is ~~flax~~ or a member of genus Brassica.

Claim 44 (new) The method according to claim 41 wherein the heterologous nucleic acid comprises the sequence set forth in SEQ ID NO: 25.

Claim 45 (new) The method according to claim 41, wherein said plant is a dicotyledon.

Claim 46 (new) The method according to claim 41, wherein said plant is a member of Brassicaceae, Limnathaceae, Tropealaceae or Simmondsia family.

Claim 47 (new) The method according to claim 41 wherein the heterologous nucleic acid is introduced into the plant by vacuum infiltration.

Claim 48 (new) The method according to claim 41 wherein the heterologous nucleic acid is introduced into the plant by *Agrobacterium tumefaciens*-mediated transformation .